

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
13 January 2005 (13.01.2005)

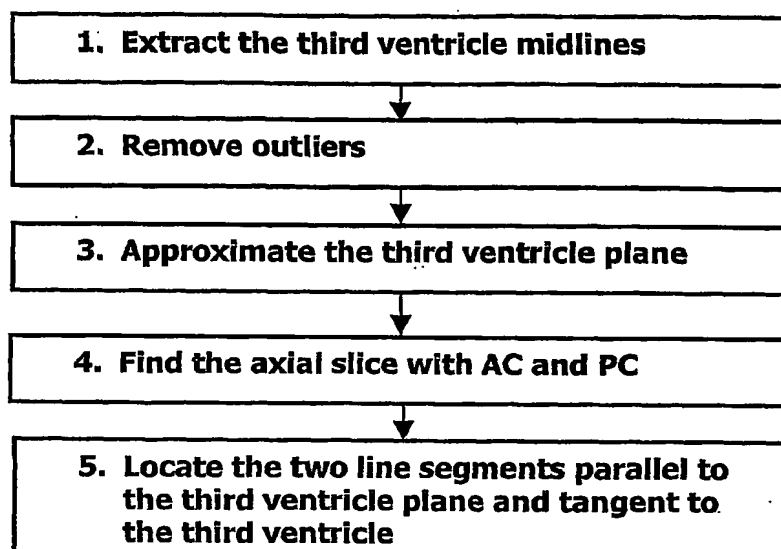
PCT

(10) International Publication Number  
**WO 2005/002444 A1**

- (51) International Patent Classification<sup>7</sup>: **A61B 6/03**, G06F 17/00, 19/00
- (21) International Application Number: PCT/SG2004/000202
- (22) International Filing Date: 6 July 2004 (06.07.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 200304160-5 7 July 2003 (07.07.2003) SG
- (71) Applicant (for all designated States except US): **AGENCY FOR SCIENCE, TECHNOLOGY AND RESEARCH** [SG/SG]; 20 Biopolis Way, #07-01 Centros, Singapore 138668 (SG).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **HU, Qingmao** [CN/SG]; 3 Jalan Rajawali #06-03, Singapore 598436 (SG). **AZIZ, Aamer** [PK/SG]; 21 Heng Mui Keng Terrace, Singapore 119613 (SG). **NOWINSKI, Wieslaw Lucjan** [PL/SG]; 111 Clementi Road, #10-06 NUS Kent Vale, Blk C, Singapore 129792 (SG).
- (74) Agent: **WATKIN, Timothy Lawrence Harvey**; Lloyd Wise, Tanjong Pagar, P.O. Box 636, Singapore 910816 (SG).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR EXTRACTING THIRD VENTRICLE INFORMATION



(57) Abstract: A method for extracting third ventricle information from images of a plurality of axial slices of a third ventricle of a brain comprises determining a midline for each of a number of the axial slices, determining the orientation of each of the midlines, generating a histogram of the orientations of the midlines, determining the peak of the histogram to provide a peak orientation, selecting the midlines having an orientation within a predetermined angle from the peak orientation and calculating the third ventricle plane from the midlines having an orientation within the predetermined angle from the peak orientation.



**Declaration under Rule 4.17:**

— *of inventorship (Rule 4.17(iv)) for US only*

**Published:**

— *with international search report*

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*